Year-End Table of Contents, Volumes 51–55 (2003)

Volume 51

Number 1

Geometry and Texture from Thousands of Images ..... *J.P. Mellor* 5
Tracking While Zooming Using Affine Transfer and Multifocal Tensors ..... *Eric Hayman, Torfi Thórhallsson and David Murray* 37
Self-Consistency and MDL: A Paradigm for Evaluating Point-Correspondence Algorithms, and Its Application to Detecting Changes in Surface Elevation ..... *Yvan G. Leclerc, Q.-Tuan Luong and P. Fua* 63

Number 2

Dynamic Textures ..... *Gianfranco Doretto, Alessandro Chiuso, Ying Nian Wu and Stefano Soatto* 91
Understanding the Behavior of SFM Algorithms: A Geometric Approach ..... *Tao Xiang and Loong-Fah Cheong* 111
Polyhedral Object Localization in an Image by Referencing to a Single Model View ..... *Ronald Chung and Hau-San Wong* 139

Number 3

Uncalibrated Motion Capture Exploiting Articulated Structure Constraints ..... *David Liebowitz and Stefan Carlsson* 171
M_2Tracker: A Multi-View Approach to Segmenting and Tracking People in a Cluttered Scene ..... *Anurag Mittal and Larry S. Davis* 189
Satellite Image Deblurring Using Complex Wavelet Packets ..... *André Jalobeanu, Laure Blanc-Féraud and Josiane Zerubia* 205
Velocity-Guided Tracking of Deformable Contours in Three Dimensional Space ..... *Reuven Zaritsky, Natan Peterfreund and Nahum Shimkin* 219

Volume 52

Numbers 1

Editorial ..... *Olivier Faugeras* 5
A Variational Framework for Retinex ..... *Ron Kimmel, Michael Elad, Doron Shaked, Renato Keshet and Irwin Sobel* 7
Observing Shape from Defocused Images ..... *Paolo Favaro, Andrea Mennucci and Stefano Soatto* 25
Constrained Structure and Motion From Multiple Uncalibrated Views of a Piecewise Planar Scene ..... *Adrien Bartoli and Peter Sturm* 45

Numbers 2/3

Special Issue on Scale-Space and Morphology
Guest Editor: Michael Kerckhove

Guest Editorial: Special Issue on Scale-Space and Morphology ..... *Michael Kerckhove* 71
Feature-Based Image Analysis ..... *Martin Lillholm, Mads Nielsen and Lewis D. Griffin* 73
A Distance Measure and a Feature Likelihood Map Concept for Scale-Invariant Model Matching ..... *Ivan Laptev and Tony Lindeberg* 97
Algebraic and PDE Approaches for Lattice Scale-Spaces with Global Constraints ..... *Petros Maragos* 121
Adjunctions in Pyramids, Curve Evolution and Scale-Spaces ..... *Renato Keshet (Kresch) and Henk J.A.M. Heijmans* 139

A Note on Two Classical Enhancement Filters and Their Associated PDE's ..... *Frédéric Guichard and Jean-Michel Morel* 153
The Vector Distance Functions ..... *José Gomes and Olivier Faugeras* 161
Selection of Optimal Stopping Time for Nonlinear Diffusion Filtering ..... *Pavel Mrázek and Mirko Navara* 189

Volume 53

Number 1

Modeling Visual Patterns by Integrating Descriptive and Generative Methods ..... *Cheng-en Guo, Song-Chun Zhu and Ying Nian Wu* 5
Stereoscopic Segmentation ..... *Anthony Yezzi and Stefano Soatto* 31
DREAM^{2}S: Deformable Regions Driven by an Eulerian Accurate Minimization Method for Image and Video Segmentation ..... *Stéphanie Jehan-Besson, Michel Barlaud and Gilles Aubert* 45
Constructing Facial Identity Surfaces for Recognition ..... *Yongmin Li, Shaogang Gong and Heather Liddell* 71
Calibrated, Registered Images of an Extended Urban Area ..... *Seth Teller, Matthew Antone, Zachary Bodnar, Michael Bosse, Satyan Coorg, Manish Jethwa and Neel Master* 93

Number 2

Tele-Graffiti: A Camera-Projector Based Remote Sketching System with Hand-Based User Interface and Automatic Session Summarization ..... *Naoya Takao, Jianbo Shi and Simon Baker* 115
Robust Photometric Invariant Region Detection in Multispectral Images ..... *Th. Gevers and H.M.G. Stokman* 135
Deformotion: Deforming Motion, Shape Average and the Joint Registration and Approximation of Structures in Images ..... *Anthony J. Yezzi and Stefano Soatto* 153
Contextual Priming for Object Detection ..... *Antonio Torralba* 169

Number 3

Human Body Model Acquisition and Tracking Using Voxel Data ..... *Ivana Mikić, Mohan Trivedi, Edward Hunter and Pamela Cosman* 199
Regularized Laplacian Zero Crossings as Optimal Edge Integrators ..... *R. Kimmel and A.M. Bruckstein* 225
Generalized Mosaicing: High Dynamic Range in a Wide Field of View ..... *Yoav Y. Schechner and Shree K. Nayar* 245

Volume 54

Numbers 1/2/3

Special Issue on Computational Vision at Brown University
Guest Editors: Michael J. Black and Benjamin B. Kimia

Guest Editorial: Computational Vision at Brown ..... *Michael J. Black and Benjamin B. Kimia* 5
A Dynamical Model of Visually-Guided Steering, Obstacle Avoidance, and Route Selection ..... *Brett R. Fajen, William H. Warren, Selim Temizer and Leslie Pack Kaelbling* 13
Symmetry Maps of Free-Form Curve Segments via Wave Propagation ..... *Hüseyin Tek and Benjamin B. Kimia* 35
The Nonlinear Statistics of High-Contrast Patches in Natural Images ..... *Ann B. Lee, Kim S. Pedersen and David Mumford* 83

Implicitization of Parametric Curves by Matrix Annihilation ..... *Hulya Yalcin, Mustafa Unel and William Wolovich* 105
A Framework for Robust Subspace Learning ..... *Fernando De la Torre and Michael J. Black* 117
On the Local Form and Transitions of Symmetry Sets, Medial Axes, and Shocks ..... *Peter J. Giblin and Benjamin B. Kimia* 143
Euler Spiral for Shape Completion ..... *Benjamin B. Kimia, Ilana Frankel and Ana-Maria Popescu* 159
Learning the Statistics of People in Images and Video ..... *Hedvig Sidenbladh and Michael J. Black* 183

Volume 55

Number 1

Perceptual Grouping by Selection of a Logically Minimal Model ..... *Jacob Feldman* 5
Stochastic Approximation and Rate-Distortion Analysis for Robust Structure and Motion Estimation ..... *Amit K. Roy Chowdhury and R. Chellappa* 27
Optical Snow ..... *Michael S. Langer and Richard Mann* 55

Numbers 2/3

Special Issue on Research at the University of North Carolina
Medical Image Display & Analysis Group (MIDAG)
Guest Editor: Stephen M. Pizer

Guest Editorial—Medial & Medical: A Good Match for Image Analysis ..... *Stephen M. Pizer* 79
Deformable *M-Reps* for 3D Medical Image Segmentation ..... *Stephen M. Pizer, P. Thomas Fletcher, Sarang Joshi, Andrew Thall, James Z. Chen, Yonatan Fridman, Daniel S. Fritsch, A. Graham Gash, John M. Glotzer, Michael R. Jiroutek, Conglin Lu, Keith E. Muller, Gregg Tracton, Paul Yushkevich and Edward L. Chaney* 85
Automatic and Robust Computation of 3D Medial Models Incorporating Object Variability ..... *Martin Styner, Guido Gerig, Sarang Joshi and Stephen Pizer* 107
Registration and Analysis of Vascular Images ..... *Stephen R. Aylward, Julien Jomier, Sue Weeks and Elizabeth Bullitt* 123
Untangling the Blum Medial Axis Transform ..... *Robert A. Katz and Stephen M. Pizer* 139
Multiscale Medial Loci and Their Properties ..... *Stephen M. Pizer, Kaleem Siddiqi, Gabor Székely, James N. Damon and Steven W. Zucker* 155